Jonathan D Smirl

List of Publications by Year
in descending order

47 papers	1,328 citations	361413 20 h-index	377865 34 g-index
50 all docs	50 docs citations	50 times ranked	866 citing authors

#	Article	IF	Citations
1	Impaired cerebral haemodynamic function associated with chronic traumatic brain injury in professional boxers. Clinical Science, 2013, 124, 177-189.	4.3	111
2	Methodological comparison of active- and passive-driven oscillations in blood pressure; implications for the assessment of cerebral pressure-flow relationships. Journal of Applied Physiology, 2015, 119, 487-501.	2.5	98
3	Static autoregulation in humans: a review and reanalysis. Medical Engineering and Physics, 2014, 36, 1487-1495.	1.7	92
4	Losing the dogmatic view of cerebral autoregulation. Physiological Reports, 2021, 9, e14982.	1.7	73
5	Dynamic cerebral autoregulation is attenuated in young fit women. Physiological Reports, 2019, 7, e13984.	1.7	72
6	Evidence for hysteresis in the cerebral pressure-flow relationship in healthy men. American Journal of Physiology - Heart and Circulatory Physiology, 2017, 312, H701-H704.	3.2	69
7	Diminished dynamic cerebral autoregulatory capacity with forced oscillations in mean arterial pressure with elevated cardiorespiratory fitness. Physiological Reports, 2017, 5, e13486.	1.7	60
8	Heading in soccer increases serum neurofilament light protein and SCAT3 symptom metrics. BMJ Open Sport and Exercise Medicine, 2018, 4, e000433.	2.9	58
9	Sport-Related Concussion Alters Indices of Dynamic Cerebral Autoregulation. Frontiers in Neurology, 2018, 9, 196.	2.4	53
10	Dynamic cerebral autoregulation across the cardiac cycle during 8 hr of recovery from acute exercise. Physiological Reports, 2020, 8, e14367.	1.7	51
11	A Prospective Transcranial Doppler Ultrasound-Based Evaluation of the Acute and Cumulative Effects of Sport-Related Concussion on Neurovascular Coupling Response Dynamics. Journal of Neurotrauma, 2017, 34, 3097-3106.	3.4	41
12	Cerebral Pressureâ€“Flow Relationship in Lowlanders and Natives at High Altitude. Journal of Cerebral Blood Flow and Metabolism, 2014, 34, 248-257.	4.3	40
13	Influence of Posture on the Regulation of Cerebral Perfusion. Aviation, Space, and Environmental Medicine, 2012, 83, 751-757.	0.5	37
14	Relationship Between Cerebral Blood Flow and Blood Pressure in Long-Term Heart Transplant Recipients. Hypertension, 2014, 64, 1314-1320.	2.7	35
15	Comparison of diurnal variation, anatomical location, and biological sex within spontaneous and driven dynamic cerebral autoregulation measures. Physiological Reports, 2020, 8, e14458.	1.7	35
16	Relationship between blood pressure and cerebral blood flow during supine cycling: influence of aging. Journal of Applied Physiology, 2016, 120, 552-563.	2.5	31
17	Where â€™ s Waldo ? The utility of a complicated visual search paradigm for transcranial Doppler-based assessments of neurovascular coupling. Journal of Neuroscience Methods, 2016, 270, 92-101.	2.5	31
18	Comparison of cerebrovascular reactivity recovery following highâ€intensity interval training and moderateâ€intensity continuous training. Physiological Reports, 2020, 8, e14467.	1.7	26

#	Article	IF	Citations
19	Differential Systolic and Diastolic Regulation of the Cerebral Pressure-Flow Relationship During Squat-Stand Manoeuvres. Acta Neurochirurgica Supplementum, 2018, 126, 263-268.	1.0	24
20	The validity and reliability of ultra-short-term heart rate variability parameters and the influence of physiological covariates. Journal of Applied Physiology, 2021, 130, 1848-1867.	2.5	23
21	Systolic and Diastolic Regulation of the Cerebral Pressure-Flow Relationship Differentially Affected by Acute Sport-Related Concussion. Acta Neurochirurgica Supplementum, 2018, 126, 303-308.	1.0	23
22	Effects of high-intensity intervals and moderate-intensity exercise on baroreceptor sensitivity and heart rate variability during recovery. Applied Physiology, Nutrition and Metabolism, 2020, 45, 1156-1164.	1.9	19
23	Utilization of the repeated squat-stand model for studying the directional sensitivity of the cerebral pressure-flow relationship. Journal of Applied Physiology, 2021, 131, 927-936.	2.5	18
24	An Acute Bout of Soccer Heading Subtly Alters Neurovascular Coupling Metrics. Frontiers in Neurology, 2020, 11, 738.	2.4	17
25	Reproducibility and diurnal variation of the directional sensitivity of the cerebral pressure-flow relationship in men and women. Journal of Applied Physiology, 2022, 132, 154-166.	2.5	16
26	Cerebral Autoregulation Is Disrupted Following a Season of Contact Sports Participation. Frontiers in Neurology, 2018, 9, 868.	2.4	15
27	What recording duration is required to provide physiologically valid and reliable dynamic cerebral autoregulation transfer functional analysis estimates?. Physiological Measurement, 2021, 42, 044002.	2.1	14
28	On the use and misuse of cerebral hemodynamics terminology using transcranial Doppler ultrasound: a call for standardization. American Journal of Physiology - Heart and Circulatory Physiology, 2022, 323, H350-H357.	3.2	14
29	Resting and exercise cerebral blood flow in long-term heart transplant recipients. Journal of Heart and Lung Transplantation, 2012, 31, 906-908.	0.6	13
30	Temporal evolution of neurovascular coupling recovery following moderateâ€•and highâ€•intensity exercise. Physiological Reports, 2021, 9, e14695.	1.7	13
31	Does task complexity impact the neurovascular coupling response similarly between males and females?. Physiological Reports, 2021, 9, e15020.	1.7	10
32	Insufficient sampling frequencies skew heart rate variability estimates: Implications for extracting heart rate metrics from neuroimaging and physiological data. Journal of Biomedical Informatics, 2021, 123, 103934.	4.3	10
33	Neurovascular coupling on trial: How the number of trials completed impacts the accuracy and precision of temporally derived neurovascular coupling estimates. Journal of Cerebral Blood Flow and Metabolism, 2022, 42, 1478-1492.	4.3	10
34	Letter to the Editor: On the need of considering cardiorespiratory fitness when examining the influence of sex on dynamic cerebral autoregulation. American Journal of Physiology - Heart and Circulatory Physiology, 2019, 316, H1229-H1229.	3.2	9
35	The impact of high- and moderate-intensity exercise on near-point of convergence metrics. Brain Injury, 2021, 35, 248-254.	1.2	9
36	Directional sensitivity of the cerebral pressureâ€“flow relationship in young healthy individuals trained in endurance and resistance exercise. Experimental Physiology, 2022, 107, 299-311.	2.0	9

#	Article	IF	Citations
37	A Prospective Transcranial Doppler Ultrasound-Based Evaluation of the Effects of Repetitive Subconcussive Head Trauma on Neurovascular Coupling Dynamics. Clinical Journal of Sport Medicine, 2020, 30, S53-S60.	1.8	8
38	Dynamic cerebral autoregulation in young athletes following concussion. , 2016, 2016, 696-699.		7
39	An acute bout of controlled subconcussive impacts can alter dynamic cerebral autoregulation indices: a preliminary investigation. European Journal of Applied Physiology, 2022, 122, 1059-1070.	2.5	6
40	The validity and reliability of an open source biosensing board to quantify heart rate variability. Heliyon, 2021, 7, e07148.	3.2	5
41	Does oscillation size matter? Impact of added resistance on the cerebral pressureâ€flow Relationship in females and males. Physiological Reports, 2022, 10, e15278.	1.7	5
42	A History of Concussion Does Not Lead to an Increase in Ocular Near Point of Convergence. International Journal of Sports Medicine, 2018, 39, 682-687.	1.7	3
43	A Standardized Buffalo Concussion Treadmill Test After Sport-Related Concussion in Youth: Do ActiGraph Algorithms Matter?. Journal of Athletic Training, 2021, 56, 1300-1305.	1.8	3
44	Long-term heart transplant recipients: Heart rate related effects on augmented transfer function coherence during repeated squat-stand maneuvers in males. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2021, 321, R925-R937.	1.8	3
45	Sex differences in autonomic recovery following repeated sinusoidal resistance exercise. Physiological Reports, 2022, 10, e15269.	1.7	3
46	Influence of highâ€intensity interval training to exhaustion on the directional sensitivity of the cerebral pressureâ€flow relationship in young enduranceâ€trained men. Physiological Reports, 2022, 10, .	1.7	2
47	Early targeted heart rate aerobic exercise for sport-related concussion. The Lancet Child and Adolescent Health, 2021, 5, 769-771.	5.6	1